# Why might psychopathy develop? Beyond a protective function: a commentary on Zara et al. (2023)

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#### **Abstract**

Purpose - Zara et al. (2023) provide novel findings into how psychopathy may develop, showing that early life predictors of poor relationships (e.g. being unwanted before birth) are predictive of psychopathy in adulthood. The authors provide a theoretical interpretation of why psychopathy might develop based on these findings by using an adaptive perspective, suggesting that psychopathy may protect or shield individuals from poor relationships. This commentary aims to critically evaluate and extend this latter suggestion in hopes of fostering further research and clarity on the topic.

Design/methodology/approach - After presenting an overview of evolutionary perspectives, a summary and elaboration are presented of the interpretation that psychopathy may be an adaptive response that functions to protect individuals from poor relationships. Then, an additional adaptive interpretation is offered.

Findings - Psychopathy describes a collection of traits and behavior that facilitates an approachoriented and exploitative motivational style that might suggest more than a protective function. When negative or poor relationships are experienced (e.g. being unwanted), it is suggested that psychopathy may begin to develop not just for protection (If I am not loved, I will shield myself from those around me) but to actively orient toward exploitation (If I am not loved, I will exploit those around me).

Originality/value - This commentary hopes to arouse further interest into the theoretical interpretations of why psychopathy may develop that are based on findings of how psychopathy develops. These considerations are consequential for understanding what to target in treatments that aim to meet the specific needs and motivations of individuals with psychopathic traits.

Keywords Psychopathy, Adaptive, Development, Motivation, Exploitation, Evolution Paper type Viewpoint

he article by Zara et al. (2023) makes an important empirical contribution of what early life factors may be involved in understanding how psychopathy develops. The child being a result of an unwanted conception, the child born to unmarried parents, the mother's poor health and family overcrowding were the main factors that were predictive of psychopathy at age 48. Equally informative, however, is that there was no evidence that adult psychopathy was predicted by obstetric complications (e.g. low birth weight, severe abnormality during childbirth). This latter finding is consistent with some past research (Lalumière et al., 2001) but is contrary to what is expected if psychopathy were a genuine disorder (Wakefield, 1992). To understand how psychopathy may develop in light of the findings of poor relationships but not poor health, the authors offer a theoretical interpretation of why psychopathy may develop, drawing on evolutionary adaptive theories of psychopathy (Ene et al., 2022). The present commentary focuses on this theoretical contribution. I first provide a description of evolutionary adaptive perspectives. Then I summarize and expand on the authors' interpretation of why psychopathy may be adaptive, which is followed by an alternative theoretical suggestion based on the broader literature

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The author wishes to thank Adelle Forth for support. encouragement and discussions on these topics. that informs the adaptiveness of psychopathy. I then outline some future research ideas and discuss why pursuing clarity on this theoretical issue can be consequential for treatment approaches of psychopathy in criminal justice settings (Ward, 2019).

# Evolutionary adaptive perspectives

Evolutionary (also referred to as "adaptive") perspectives aim to understand whether traits and behavior exist in a species because they have some survival and/or reproductive value. A useful framing that helps differentiate evolutionary perspectives is the ultimate-proximate distinction (Mayr, 1961; Scott-Phillips et al., 2011). Proximate inquiries aim to understand how a trait or behavior develops or how its physiology works. In contrast, ultimate inquiries examine why a trait or behavior develops or why it was selected into a species (Bergman and Beehner, 2022; Tinbergen, 1963). Ultimate inquiries hence pursue evolutionary accounts of traits and behavior by seeking to understand the use or function it may have served or currently serves that explains why it exists in a particular species (i.e. why the trait/behavior develops). Although a social value approach may interpret "purpose" or "function" of traits or behavior as the means of obtaining socially valued outcomes (e.g. happiness, healthy relationships), an evolutionary approach perceives "purpose" or "function" of traits or behavior in whether and how they facilitate(d) survival and/or successful reproduction, which does not necessarily correspond to producing socially valued outcomes (Andrews et al., 2002; Tooby and Cosmides, 2016). Importantly, ultimate (e.g. evolutionary) and proximate (e.g. developmental) perspectives - although different levels of analysis - should be concordant with each other and together may offer a more comprehensive account of phenomena (Ward and Durrant, 2011).

A couple of examples might be helpful to show how an evolutionary adaptive perspective can provide a different level of analysis on human issues. The first is pregnancy sickness (Schmitt and Pilcher, 2004). A proximate perspective of pregnancy sickness might seek to identify the mechanisms involved in producing the experience of pregnancy sickness, including how the sense of smell becomes hyperactive and the environmental factors that contribute to its activation (e.g. presence of specific types of food). Alternatively, an ultimate/evolutionary perspective might aim to understand what function such a response would have for the survival and/or reproductive success of those involved. One possibility is that pregnancy sickness exists because it functions to reduce the likelihood of consuming substances that could be harmful to the fetus (Profet, 1992). A criminal justice example is theft (Kanazawa, 2008). Whereas proximate perspectives might try to understand the processes and mechanisms involved in theft (e.g. environmental triggers, neural risk factors), an ultimate perspective might try to understand why theft may provide a survival or reproductive benefit for individuals. One clear possibility is that theft facilitates access to otherwise unobtainable desirable resources, which can increase survival and/or enhance reproductive opportunities, even if it does come with risks (Kanazawa, 2008). Returning to the topic of psychopathy, and in line with the efforts of Zara et al. (2023), it is possible to examine both proximate (e.g. how psychopathy develops) and ultimate (e.g. why psychopathy develops) perspectives to gain a more comprehensive account of the topic.

# A protective function of psychopathy?

A large body of research informs the processes and mechanisms involved in how psychopathy develops. Many of these studies, including Zara et al. (2023), show that environments constituted by adverse childhood experiences seem to be associated with higher levels of psychopathy (Baglivio et al., 2020; Farrington and Bergstrøm, 2021). Many of these findings point to the presence of negative relationships that result in higher rates of abuse and neglect (Boduszek et al., 2019; de Ruiter et al., 2022), whereas other findings suggest social and economic disadvantage including reduced resources and social opportunities (Bégin et al., 2021; Piotrowska et al., 2015). An important contribution Zara et al. make is showing how early life adversity, including events occurring prenatally, may factor into psychopathy's development.

How could experiencing these negative environments – being unwanted before birth, being neglected, having social disadvantage - factor into psychopathy being considered adaptive? Zara et al. suggest that psychopathy - the interpersonal selfishness, callous disregard of others, impulsive sensation seeking and chronic antisociality that characterizes the syndrome - may begin to develop because it "could be a way of shielding oneself from further rejection and emotional distancing" (p. 9) in the context of these poor relationships. This interpretation suggests that psychopathy may develop because it offers a protective response to the lack of attachment figures - making it an attachment coping response (see also Ribeiro da Silva et al., 2015). The logic is that poor and neglectful relationships are experienced, which forecasts to the child that connecting with others could be damaging and costly (If I am not loved, I will shield myself from those around me). The adaptive reasoning posits that psychopathy develops as a shield or protection that ultimately promotes survival in harsh conditions. From this interpretation, psychopathy may be adaptive because it functions as a survival mechanism by removing – and thus protecting – oneself from negative relationships.

However, the many features underlying psychopathy as outlined above seem to go well beyond what might be required for serving the purpose (and hence function) of protection from negative relationships. Because evolution operates on an as-needed basis and is unlikely to produce unnecessary features that do not serve an adaptation's purpose (Williams, 1966), it is important to ask how each of the features of psychopathy would promote the function of protecting oneself from negative relationships. For example, how do each of the features of psychopathy, such as grandiosity, egocentricity and impulsivity (among others), work to protect individuals from poor relationships? Several of psychopathy's features (e.g. promiscuity, sensation seeking) may even suggest actively seeking out relationships rather than protection from them.

We can also shift the focus and ask what type of personality would be an effective protection from relationships? Arguably, the most effective form of protection from relationships might involve complete or extreme avoidance of relationships. If there is a personality style that fits this most effective protective function (complete or extreme relationship avoidance), it might be avoidant personality disorder - characterized by chronic avoidance of social interactions, social isolation and unwillingness to get close with others (APA, 2013) - rather than psychopathy. Interestingly, individuals with high levels of psychopathic traits seem to show lower levels of avoidant personality disorder (Hart and Hare, 1989; Myers et al., 1995). Although the two personality styles might have some aspects in common (e.g. avoidant attachment), psychopathy and avoidant personality seem to have a different combination of traits that suggest different operative functions to each personality style, with the possibility that avoidant personality more closely matches the function of protecting oneself from relationships. In contrast, when discussing the possible adaptive function of psychopathy, there seems to be more involved than just passive protection.

# An active exploitation function of psychopathy

An additional adaptive interpretation of psychopathy – asking why it develops – is not just that it provides passive protection from poor relationships but that it provides the active facilitation of exploitation of those relationships. In the context of the early life predictors identified by Zara et al., this alternative suggestion is that the unique traits of psychopathy may begin developing because they facilitate an active approach toward exploiting the neglectful (e.g. being unwanted) and competitive (e.g. overcrowded family) environment in which they are found. Instead of or in addition to a passive function to psychopathy (If I am not loved, I will shield myself from those around me), it may also or instead provide an active function (If I am not loved, I will exploit those around me).

The multiple and varied features in psychopathy seems to align with the facilitation of active exploitation in addition to or rather than passive protection. For example, traits such as grandiosity and egocentricity describe a heightened sense of self-importance and extreme concern for oneself, which fits with an active approach to exploiting relationships. Callousness and lack of empathy might help facilitate being unmoved by the concerns and suffering of others while the exploitation is planned and carried out. Traits such as sensation seeking and impulsivity in turn might contribute to this active exploitation by triggering incessant and hyperactive approach-oriented behavior resulting in opportunities for new relationships that can be exploited. Not surprisingly, this combination of traits geared toward exploitation seems likely to affect engaging in antisocial and criminal behavior especially if one's early environment is filled with antisocial role models and opportunities – but this may not be a necessary outcome. For instance, if individuals with psychopathic traits find ways of exploiting others that does not involve breaking the law, they may be able to avoid offending behavior (for the discussion of psychopathy and offending, see Boduszek et al., 2021, 2022; Cooke et al., 2012).

This alternative adaptive function of psychopathy - facilitating an active (exploitative) function – is also more concordant with the broader literature on psychopathy. For instance, psychopathy is often associated with an underactive behavioral inhibition system and overactive behavioral activation system (Neria et al., 2016), which seems to promote actively seeking out relationships for exploitation rather than shielding oneself from them. A cognitive account of psychopathy suggests that psychopathic individuals have an exaggerated attentional bottleneck, which involves delayed or completely inhibited processing of secondary streams of information, resulting in an incessant focus on and pursuit of one's goals (Baskin-Sommers and Brazil, 2022). This seems to be a prime cognitive mechanism to facilitate active and ruthless engagement in exploitative relationships. A motivational account of psychopathy further suggests there are fundamental motivational differences among psychopathic individuals, orienting them toward active and persistent exploitation (Groat and Shane, 2020). Hence, this alternative interpretation suggests that the adaptiveness of psychopathy may be in providing an incessant, focused and ultimately selfish orientation to life that facilitates exploiting others and resulting in some reproductive success in adolescence/adulthood that otherwise might not be achievable in such dire conditions. An important suggestion from the findings of Zara et al. is that poor early relationships may be a reason why youth come to develop this exploitative style (e.g. If I am not loved, I will exploit those around me).

To summarize, based on the findings of Zara et al. (2023) and others (de Ruiter et al., 2022) that inform how psychopathy develops, poor early relationships seem to predict the development of psychopathy. But the question of why psychopathy develops - examining its possible adaptiveness - given these poor relationships is a different consideration, one that benefits from evolutionary theorizing. The suggestion here is that the adaptiveness of psychopathy (if it can be considered adaptive) is likely to be facilitating the active exploitation of those negative or poor relationships rather than only passively removing oneself from them. In other words, psychopathy may "benefit" someone experiencing negative relationships because of what it actively provides them in those contexts.

# Future research

An important task for future research is to integrate adaptive perspectives of psychopathy with broader issues in the psychopathy literature. For instance, how might an adaptive function of protection and/or exploitation relate to gender and how might this inform the construct of psychopathy across gender (Strand et al., 2016)? Because males and females differ in the reproductive challenges they face (Buss, 2017), it may be important to examine how sexual and relationship factors are involved in adaptive perspectives of psychopathy across gender (Forth et al., 2022). As mentioned above, it would be useful to incorporate how adaptive perspectives inform the debate on offending behavior and psychopathy (Boduszek et al., 2021; Cooke et al., 2012). For instance, an exploitative function of psychopathy may suggest that offending behavior is optional and that given other exploitative opportunities that do not involve crime (e.g. unethical behavior, cheating on others, subtle intimidation), individuals with psychopathic traits may not engage in crime. Lastly, it is important to examine how an adaptive perspective informs the developmental process of psychopathy itself, including how the construct of psychopathy manifests in youth (Ellingwood et al., 2017) and its potential developmental (in)stability (McCuish and Lussier, 2018).

A potential benefit of adopting an evolutionary view of psychopathy is that it helps avoid an assumption of disorder or dysfunction (Wakefield, 1992). This change in view may enable future research to examine novel hypotheses about psychopathy. The "hidden talents" approach may facilitate this change in view, which argues that individuals who grow up in adverse conditions do not just have impairments but also may have enhanced cognitive abilities that fit those individuals to their specific environments (Ellis et al., 2023). The argument in this commentary has been that the unique "abilities" of psychopathy may be in fostering effective exploitation (Jones, 2014). For example, psychopathic individuals may have an increased ability to detect vulnerability in others (Book et al., 2007), deceptively appear attractive to others (Brazil et al., 2023) and focus on a goal to the exclusion of external distractors (Baskin-Sommers and Brazil, 2022). Future research could adopt this "hidden talents" or ability-focused framework to examine how psychopathy may enhance mental abilities in social situations that involve susceptibility to exploitation (e.g. highly competitive or vulnerable environments where contested desirable resources or mates are present). Another important avenue would be to assess for the potential "success" of these "abilities" in different settings, including across more chaotic and harsh environments as well as regulated and secure ones. Psychopathy may have more exploitative "success" in the former but not the latter. The goal of this research should obviously not be to justify or glorify these abilities, but to include them in our growing conception of how and why psychopathy may develop, and to consider both impairments and abilities when adopting intervention strategies.

# Treatment and prevention implications

How might using an adaptive perspective help when seeking solutions to the problems psychopathy poses in society? In general, pursuing theoretical clarification of a topic can produce more informed criminal justice practice (Ward, 2019). In addition, adaptive perspectives may generally offer unique guidance for criminal justice rehabilitation (Ward and Durrant, 2011). When it comes to treating psychopathy in criminal justice settings, an adaptive perspective provides a unique view in conceptualizing both the costly impairments/challenges and potential beneficial abilities/skills of the offender (Ellis et al., 2023). Importantly, these more "beneficial" aspects may not be beneficial or positive in a socially desirable way, but rather in how they may help individuals achieve evolutionarily relevant goals such as obtaining resources, status or mates. Thus, psychopathic traits and the "abilities" these traits may facilitate could be subjectively appealing to those who bear them, which could factor into why motivating offenders with psychopathic traits to change is so challenging. Taking an adaptive view of psychopathy then may help accommodate these challenging elements when planning treatments that involve psychopathic individuals and navigating their engagement with treatment. This perspective thus might reasonably be integrated with treatments that consider an offender's unique strengths and risks when it comes to planning rehabilitation (Ward et al., 2007).

For more appropriate treatments, it may also be pertinent to seek clarity on the theoretical issue of why psychopathy may be adaptive - hence the protracted effort toward this end in the commentary. Knowing what something is adapted for can help identify the needs it addresses and its constraints. For instance, if psychopathy is adaptive because it is an attachment coping response that protects against poor relationships, then treatments aimed at mending attachment needs might be most effective and sufficient to reduce psychopathy and its antisocial outcomes. On the other hand, if psychopathy develops because it facilitates active-oriented exploitation, then treatments might want to consider factors beyond attachment, including motivational and reward system needs (Caldwell et al., 2007). Armed with a greater understanding of what these traits may do for individuals (i.e. their function), we may more effectively match an individual to appropriate treatment regimens while understanding what contraindicated treatments would be (for examples of contraindicated treatments with psychopathic offenders, see Rice et al., 1992; Swogger et al., 2016).

A developmentally informed adaptive perspective of psychopathy also strongly orients us toward prevention efforts (Reidy et al., 2015). Because adaptive responses are logical calibrations to environmental circumstances or inputs, working to change inputs (e.g. neglectful relationships) or offer alternative ones (e.g. prosocial opportunities for success) while youth are still developing their personality could promote shifts toward other adaptive personality responses, away from psychopathy. Ultimately, the hope of this commentary is that along with the novel contributions of Zara et al. (2023), we might stimulate an ongoing discussion of not just how psychopathy develops but also why it develops, facilitating further theory and research with the goal of improving interventions for some of the most challenging individuals.

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